

SEMICONDUCTOR DEVICE PACKAGE DIEPAD HAVING FEATURES FORMED BY ELECTROPLATING

ABSTRACT OF THE DISCLOSURE

Embodiments in accordance with the present invention relate to the fabrication of packages for semiconductor devices, and in particular to the use of electroplating techniques to form features on the surface of a metal lead frame. In accordance with one embodiment, electroplating is used to fabricate non-integral pin portions shaped to remain securely encapsulated within the plastic molding of the package. In accordance with another embodiment, electroplating may be used to fabricate protrusions on the underside of the lead frame for elevating the package above the PC board, thereby preserving the rounded shape of solder balls used to secure the diepad to the PC board. In accordance with yet another embodiment, electroplating may be used to fabricate raised patterns on the upper surface of the diepad for ensuring uniform spreading of adhesive used to secure the die to the diepad, thereby ensuring level attitude of the die within the package.

60091257 v1